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Fear of COVID-19 and Perceived COVID-19 Infectability Supplement Theory of Planned Behavior to Explain Iranians' Intention to Get COVID-19 Vaccinated

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Abstract: One of the most efficient methods to control the high infection rate of the coronavirus disease 2019 (COVID-19) is to have a high coverage of COVID-19 vaccination worldwide. Therefore, it is important to understand individuals' intention to get COVID-19 vaccinated. The present study applied the Theory of Planned Behavior (TPB) to explain the intention to get COVID-19 vaccinated among a representative sample in Qazvin, Iran. The TPB uses psychological constructs of attitude, subjective norm, and perceived behavioral control to explain an individual's intention to perform a behavior. Fear and perceived infectability were additionally incorporated into the TPB to explain the intention to get COVID-19 vaccinated. Utilizing multistage stratified cluster sampling, 10,843 participants (4092 males; 37.7%) with a mean age of 35.54 years ($SD = 12.00$) completed a survey. The survey assessed TPB constructs (including attitude, subjective norm, perceived behavioral control, and intention related to COVID-19 vaccination) together with fear of COVID-19 and perceived COVID-19 infectability. Structural equation modeling (SEM) was performed to examine whether fear of COVID-19, perceived infectability, and the TPB constructs explained individuals' intention to get COVID-19 vaccinated. The SEM demonstrated satisfactory fit (comparative fit index = 0.970; Tucker-Lewis index = 0.962; root mean square error of approximation = 0.040; standardized root mean square residual = 0.050). Moreover, perceived behavioral control, subjective norm, attitude, and perceived COVID-19 infectability significantly explained individuals' intention to get COVID-19 vaccinated. Perceived COVID-19 infectability and TPB constructs were all significant mediators in the relationship between fear of COVID-19 and intention to get COVID-19 vaccinated. Incorporating fear of COVID-19 and perceived COVID-19 infectability effectively into the TPB explained Iranians' intention to get COVID-19 vaccinated. Therefore, Iranians who have a strong belief in Muslim religion may improve their intention to get COVID-19 vaccinated via these constructs.